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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/060,876	01/30/2002	Robert McGowan Mann	31311.104	6936

7590 03/14/2003

Paul F. Wille
6407 East Clinton Street
Scottsdale, AZ 85254

EXAMINER

BOSWELL, CHRISTOPHER J

ART UNIT	PAPER NUMBER
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3676

DATE MAILED: 03/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/060,876

Applicant(s)

MANN, ROBERT MCGOWAN

Examiner

Christopher Boswell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4, 9-10, and 13 rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent Number 5,194,309 to Knudsen.

Knudsen discloses a seal between a frame and a moveable member, the seal comprising an elongate support member (17) having opposed upper and lower faces and opposed first and second sides, and a sealing lip (16 and 18) extending along and being joined to the support member, the sealing lip having an anchor portion (21) and a sealing portion (see figure below), the sealing portion being spaced from the support member by the anchor portion and having an edge which defines a terminal sealing edge (see figure below) of the sealing lip, as in claim 1.

Knudsen also discloses the sealing lip and support member are formed from an elastomer, plastic material (column 3, lines 1-6), as in claims 2 and 4.

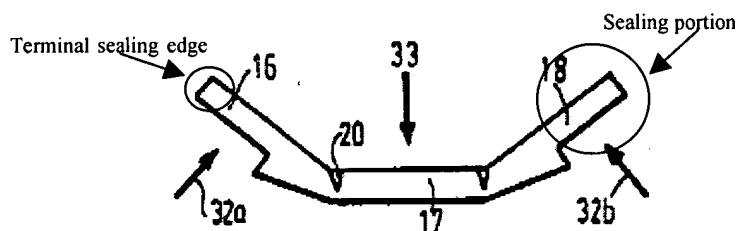
Knudsen further discloses the anchor portion being hingedly connected to the first side (figure 2), as in claim 3.

Knudsen additionally discloses the anchor portion having an inner face and an outer face, the inner face being in a face to face contact with the first side when the sealing lip is in an operative position (figure 6 at location 20), the outer face being provided with face engagement

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means which are engageable with a side of a groove (figure 4) formed in the frame or movable member to retain the seal with in the groove, as in claim 9.

Knudsen also discloses a second sealing lip, as defined in claim 1, being located adjacent the second side of the support member (figure 2), as in claim 10.



Knudsen further discloses a method of forming a seal between a frame and a movable member mounted on a frame, the method comprising forming a groove (22) in the frame or movable member and locating a gas seal, as noted above, within the groove with the lower face of the support member adjacent to the bottom of the groove (figure 4) so as to trap the anchor portion of each sealing lip between a side of the groove and the opposed side of the support member, as in claim 13.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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Claims 5-8, 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Knudsen, as applied above, in view of U.S. Patent Number 5,279,087 to Mann.

Knudsen discloses the invention substantially as claimed. Knudsen discloses the support member and sealing lip being extruded (column 2, lines 60-61) from an elastomer (column 3, lines 1-5). However, Knudsen does not disclose the support member and sealing lip being co-extruded. Mann teaches of a support member and sealing lip being co-extruded in the same field of endeavor for the purpose of being integrally connected (column 1, lines 39-48). It would have been obvious to one with ordinary skill in the art at the time the invention was made to co-extrude the support member and sealing lip, when the aforementioned items are made from different materials, in order to establish an integral connection.

Knudsen discloses the invention substantially as claimed in claims 6 and 7. However, Knudsen does not disclose the sealing lip co-extruded with a planar strip-like body. Mann teaches the location of the seal can be anywhere within the frame of a door, including the upper width where the sealing element (26) would be on the lower face of the support member (22), having the sealing lip with the support member wherein the support member being a planar strip-like body (figure 3) in the same field of endeavor for the purpose of providing a seal between the upper part of the door and the top section of the frame. It would have been obvious to one with ordinary skill in the art at the time the invention was made to invert the seal described above in order to achieve a seal between the top of a door and the frame.

Knudsen further discloses the sealing lip being extruded (column 2, lines 60-61) to define a hinge (20) from the first side to enable the sealing lip to move relative to the support member between the inoperative and operative positions, as in claim 8.

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Knudsen discloses the invention substantially as claimed in claims 11 and 12. However, Knudsen does not disclose the support member being used as a fire seal or the support member comprising an intumescent material. Mann teaches the use of a seal encompassing an intumescent material (24) in the analogous art of seals between a frame and a moveable member for the purpose of providing a fire and smoke seal (column 1, lines 7-11). It would have been obvious to one with ordinary skill in the art at the time the invention was made to manufacture the support member of Knudsen to be a hollow member filled with an intumescent material in order to act as a fire and smoke seal between a frame and a moveable member.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following patents are cited to further show the state of the art with respect to hinged seals, U-shaped seals, and seals with intumescent materials:

U.S. Patent Number 5,248,542 to Hinzpeter et al., U.S. Patent Number 5,247,764 to Jeshurun et al., U.S. Patent Number 5,007,202 to Guillon, U.S. Patent Number 4,931,339 to Malcolm-Brown, U.S. Patent Number 4,648,207 to Shibasaki, U.S. Patent Number 4,497,137 to Nelson, U.S. Patent Number 4,354,304 to Dixon, U.S. Patent Number 4,246,304 to Dixon, U.S. Patent Number 4,045,930 to Dixon.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Boswell whose telephone number is (703) 305-4067. The examiner can normally be reached on 8:30 - 5:00 M-F.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Knight can be reached on (703) 308-3179. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9326 for regular communications and (703) 872-9327 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Anthony Knight
Supervisory Patent Examiner
Technology Center 3600

CJB
March 7, 2003